



B-HUNTER UAV



**Program update, recent flight
experience and progress in ATM
Euro UVS UAV 2002 Conference**



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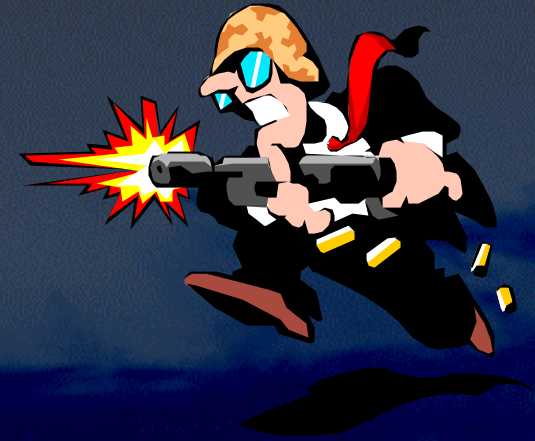
Presentation overview

- Introduction
- B-HUNTER program update
 - Present program status
 - Critical issues
 - Way ahead and mid-term planning
- Flight experience and ATM
 - Allocated UAV flight areas
 - Flight safety process overview
- Questions



Introduction: reminder

- Contract B-HUNTER signed on Dec 14th 98
- Missions to fulfil:
 - Tactical IMINT (CCD + FLIR)
 - Target Acquisition
 - Damage Assessment
 - Artillery fire adjustment
- 3 systems ordered (6 AV and 2 GCS + GDT)
- Operated by Army unit
- Contractor: EAGLE (IAI Malat, Sonaca, Thales BE)



B-HUNTER system legacy

- B-Hunter = integration of:

- Short-range (US) Hunter:

- Aerial Vehicle
- Backup uplink UHF instead of C band, no ADR



- (IL) Searcher:

- Advanced GCS
- Some sensors (Air T°)



+ GFE !!!

+ PRCS

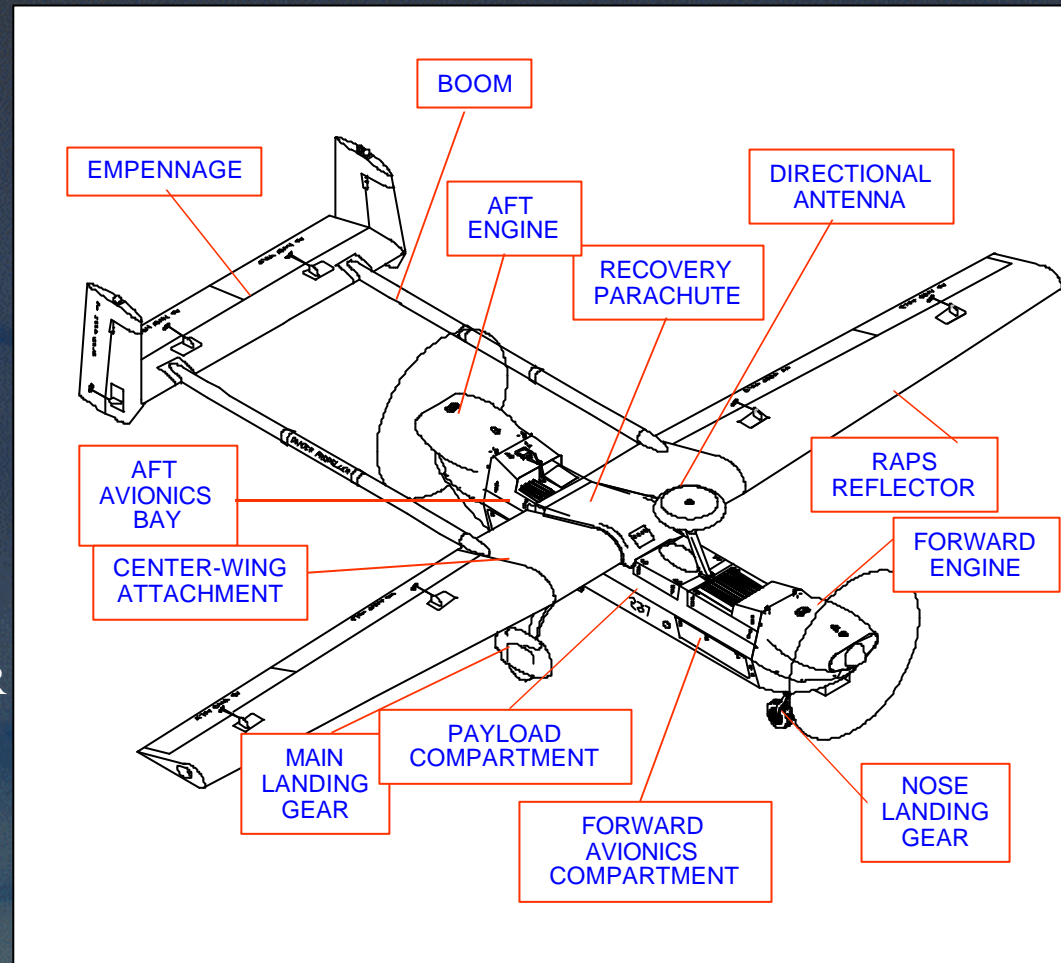
- (CH) Ranger:

- Automatic take-off and landing system (ATLS)
- Multipurpose Optronic Stabilized Payload (MOSP)
- Avionics computer



System: Aerial Vehicle (18 EA)

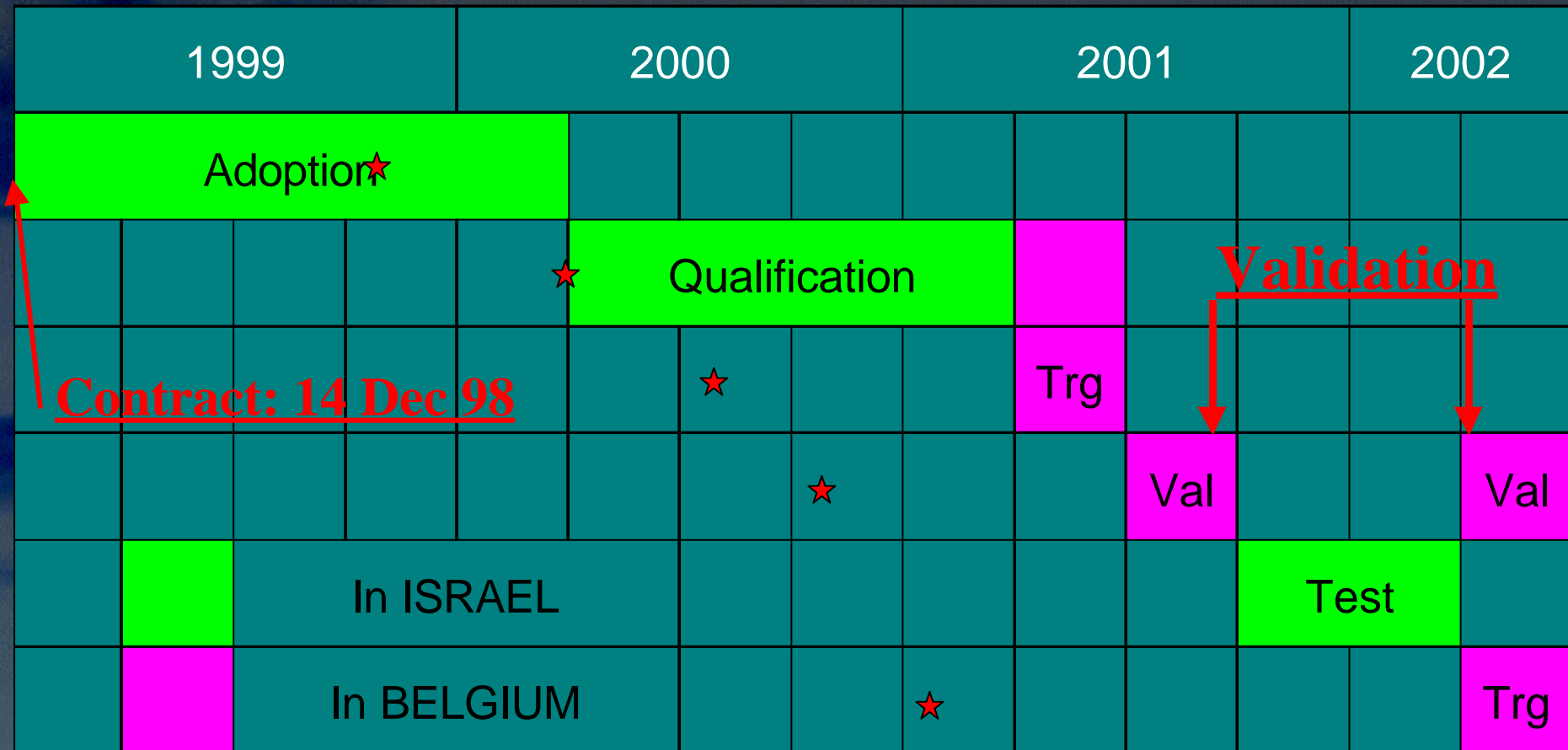
Weight (Empty): 532 kg
Max T/O Weight: 727 kg
Max Payload Weight: 125 kg
Length: 6.9 m
Wingspan: 8.9 m
Endurance: 11.6 hrs demonstrated
Operational Range: >125 km
Range With Relay: >200 km
Cruise Speed: 60 - 80 knots
Max Speed: 110 knots
Max Ceiling: 15,000 ft
Payload: Day/Night TV and FLIR
Launch Recovery : Unprepared terrain
300 x 25 m wheeled
0 length with RATO



System: AGCS and GDT (6 EA)



Present situation: contractual



1999				2000			2001			2002	
Adoption★											
				★	Qualification				Validation		
<u>Contract: 14 Dec 98</u>					★			Trg			
						★			Val		Val
		In ISRAEL								Test	
		In BELGIUM					★				Trg

System validation: clarifications

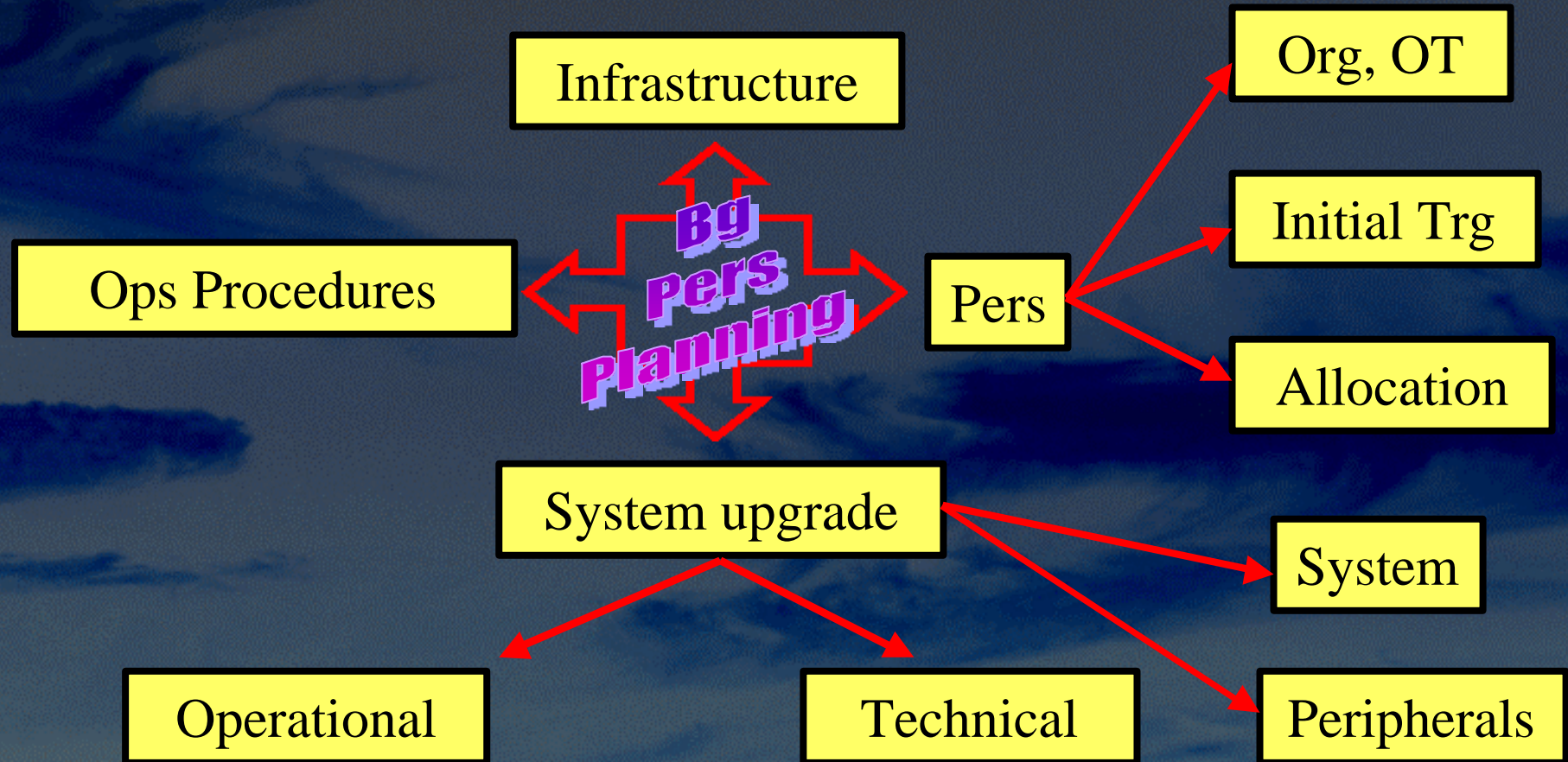


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Critical Issues

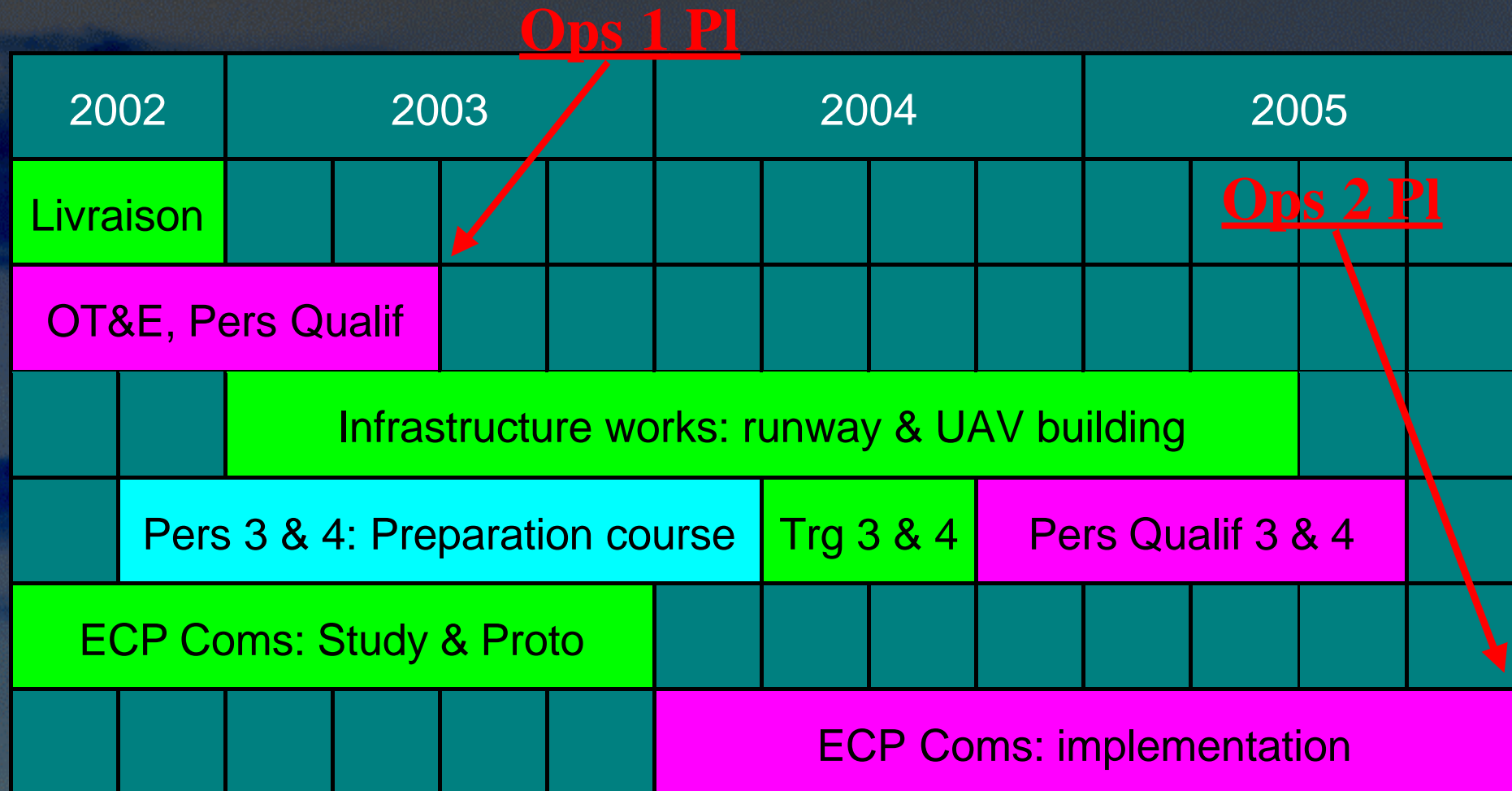




Mandatory System updates

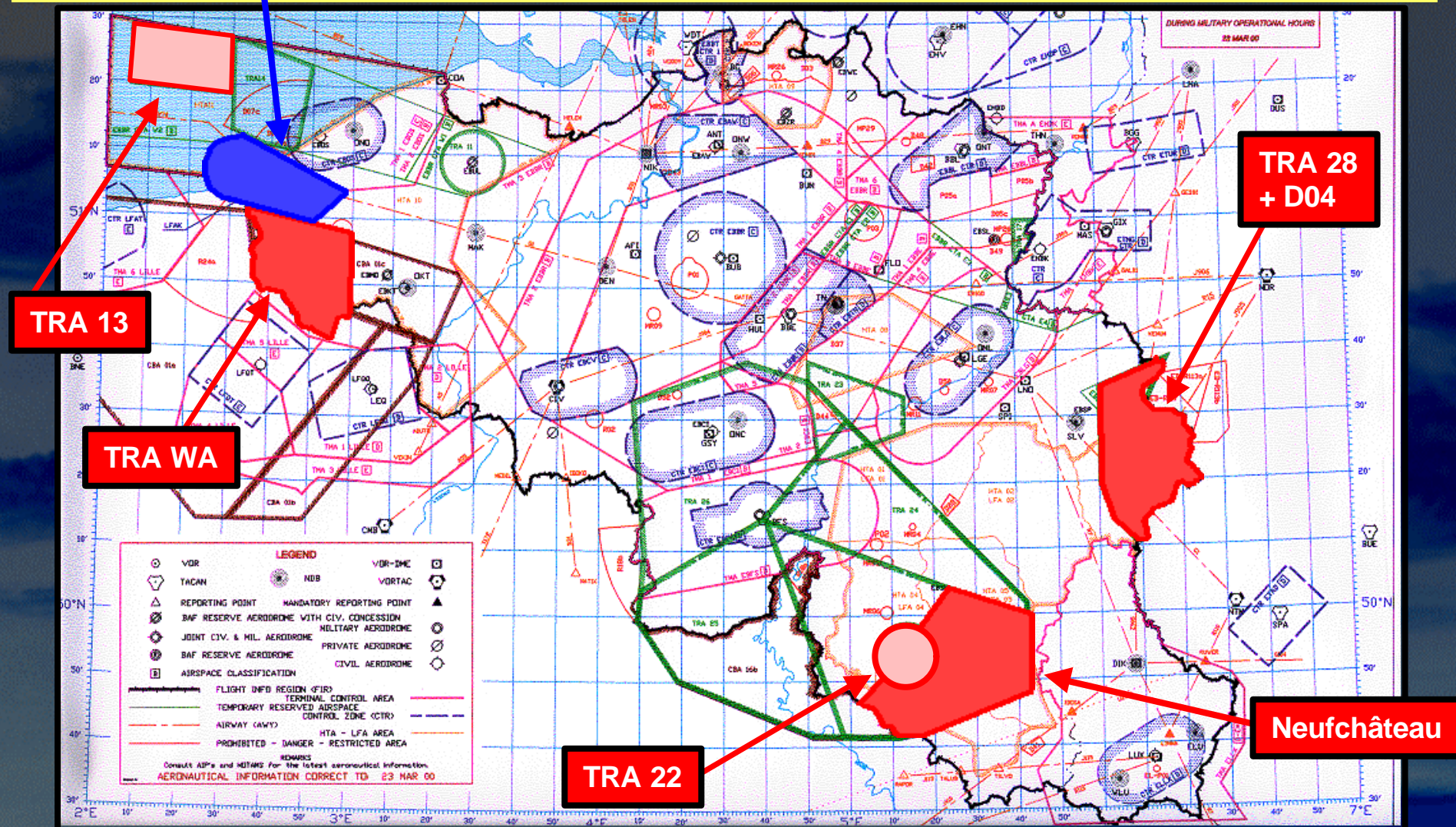
- For technical reasons (*make system useable*)
 - Datalink update (UHF >> C-band)
 - ATC communications
 - Miscellaneous (GSTe, RAPS, Software)
- For operational reasons (*make system useful*)
 - TACOM
 - Hardware and Software interfaces
 - Communication means
 - Battery Operation Center

Way ahead: Mid-term planning



CTR BKoks

Allocated UAV flight areas

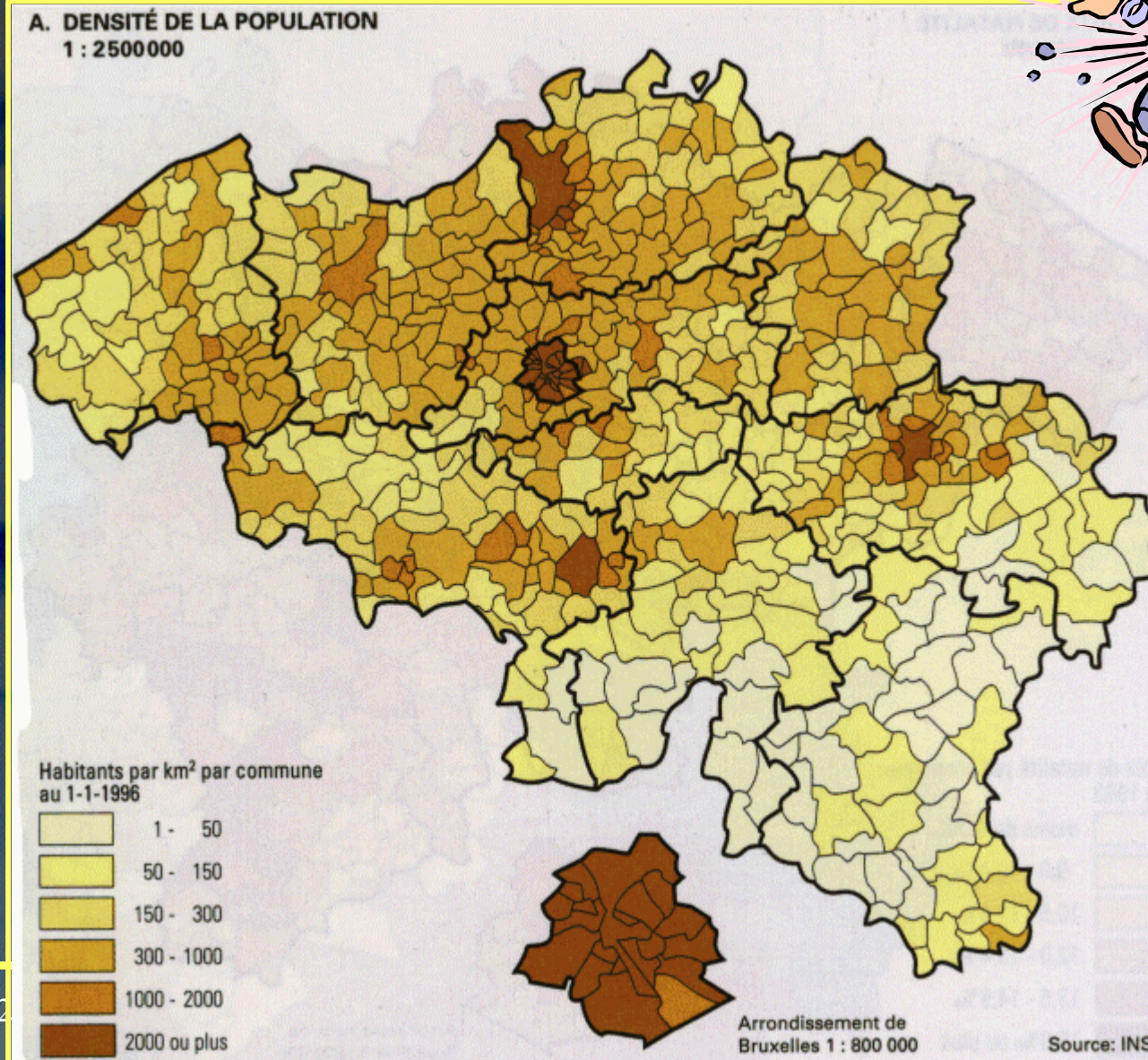
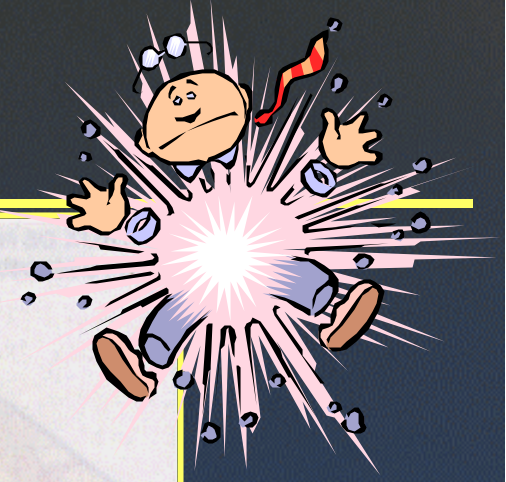


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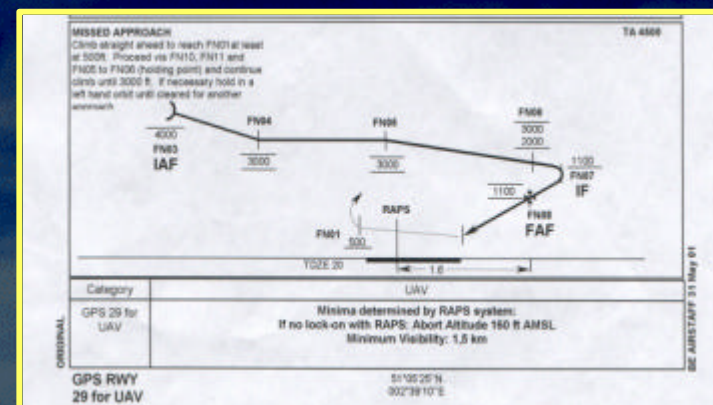
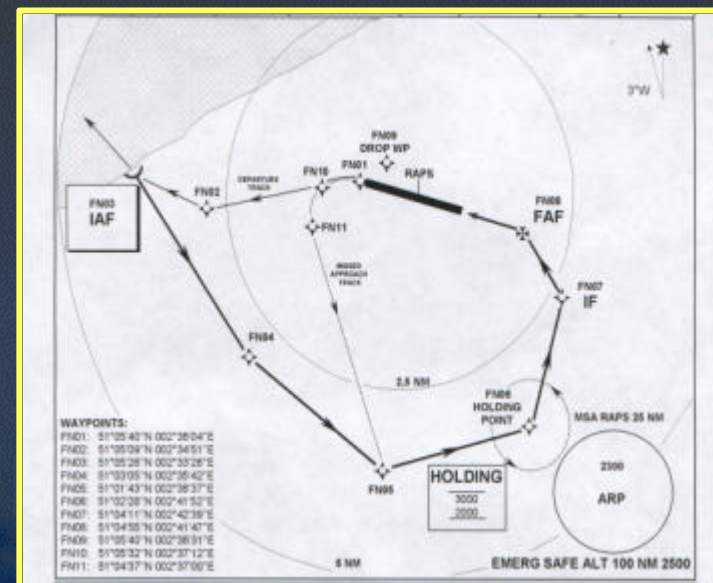
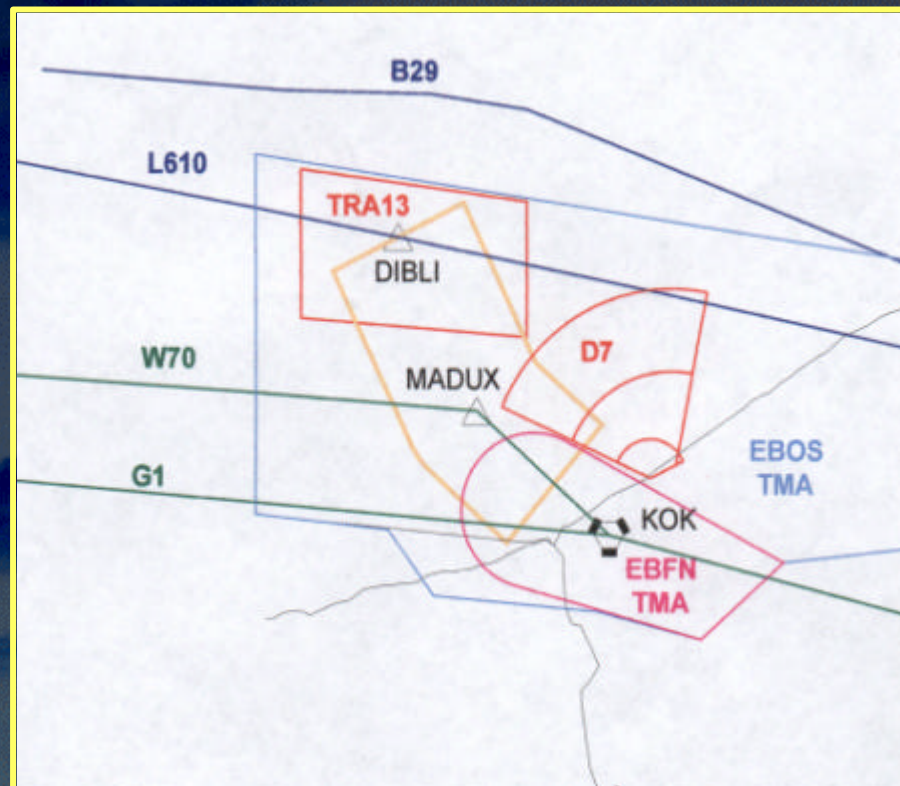
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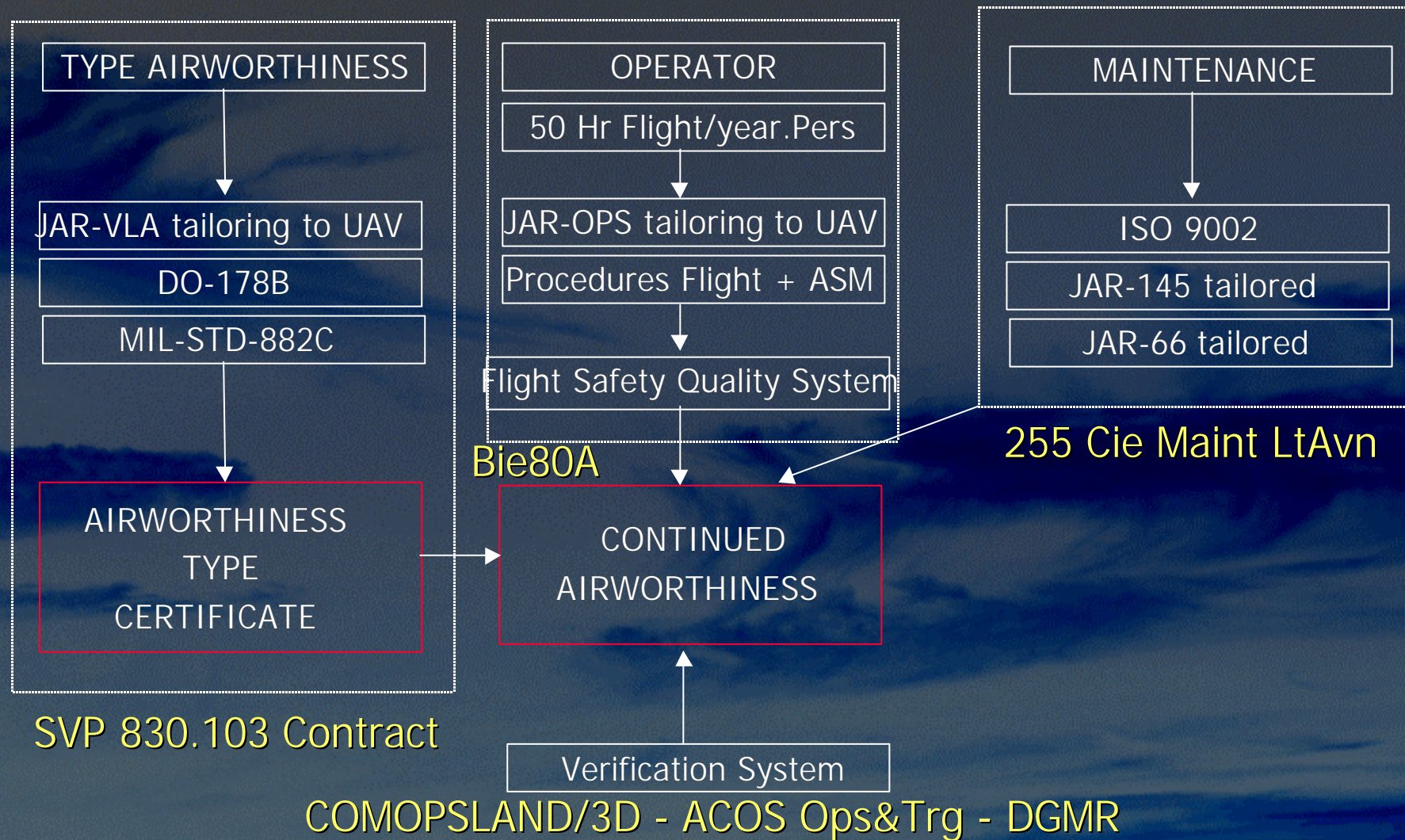
Population Density



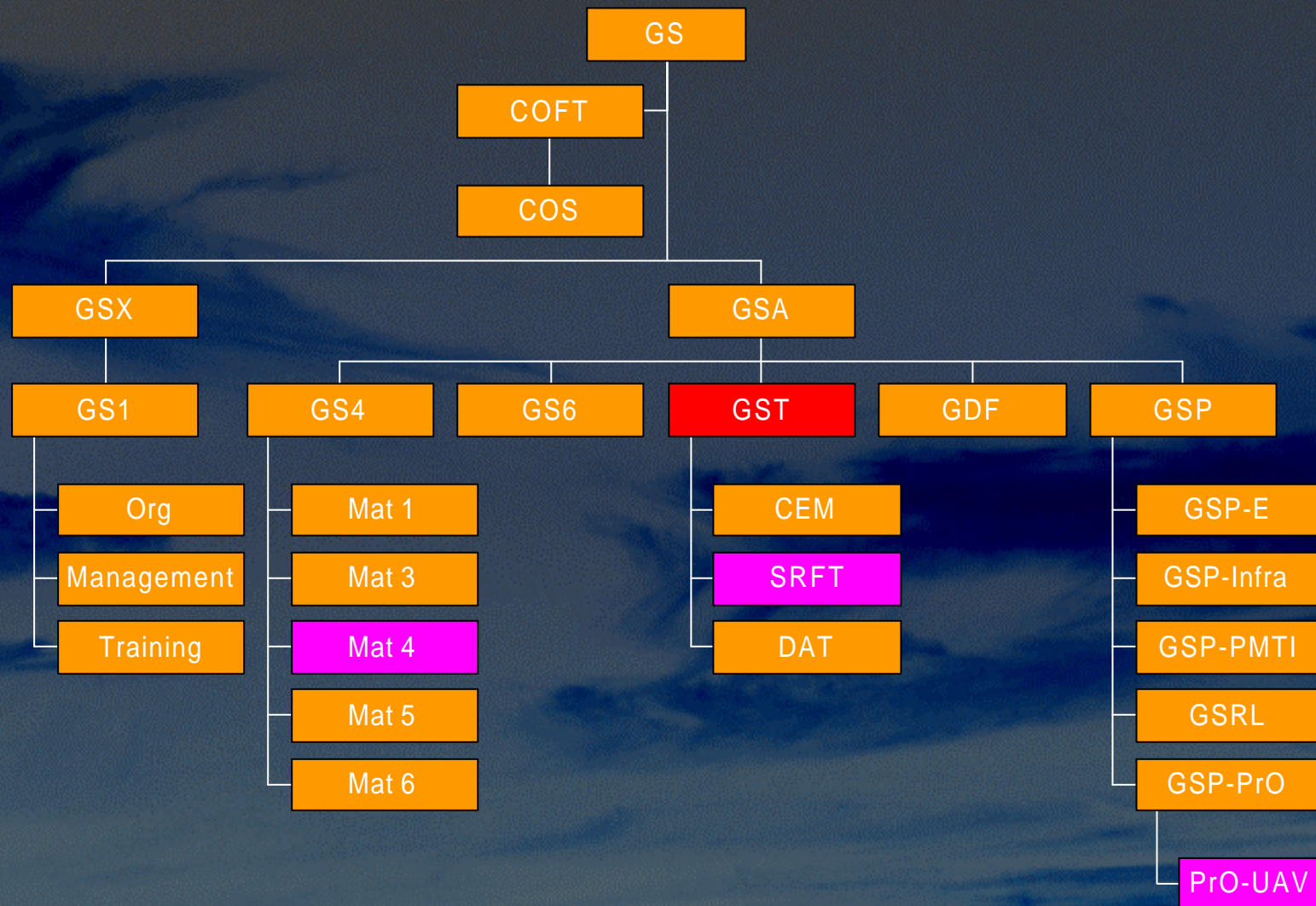
Operations in TRA 13



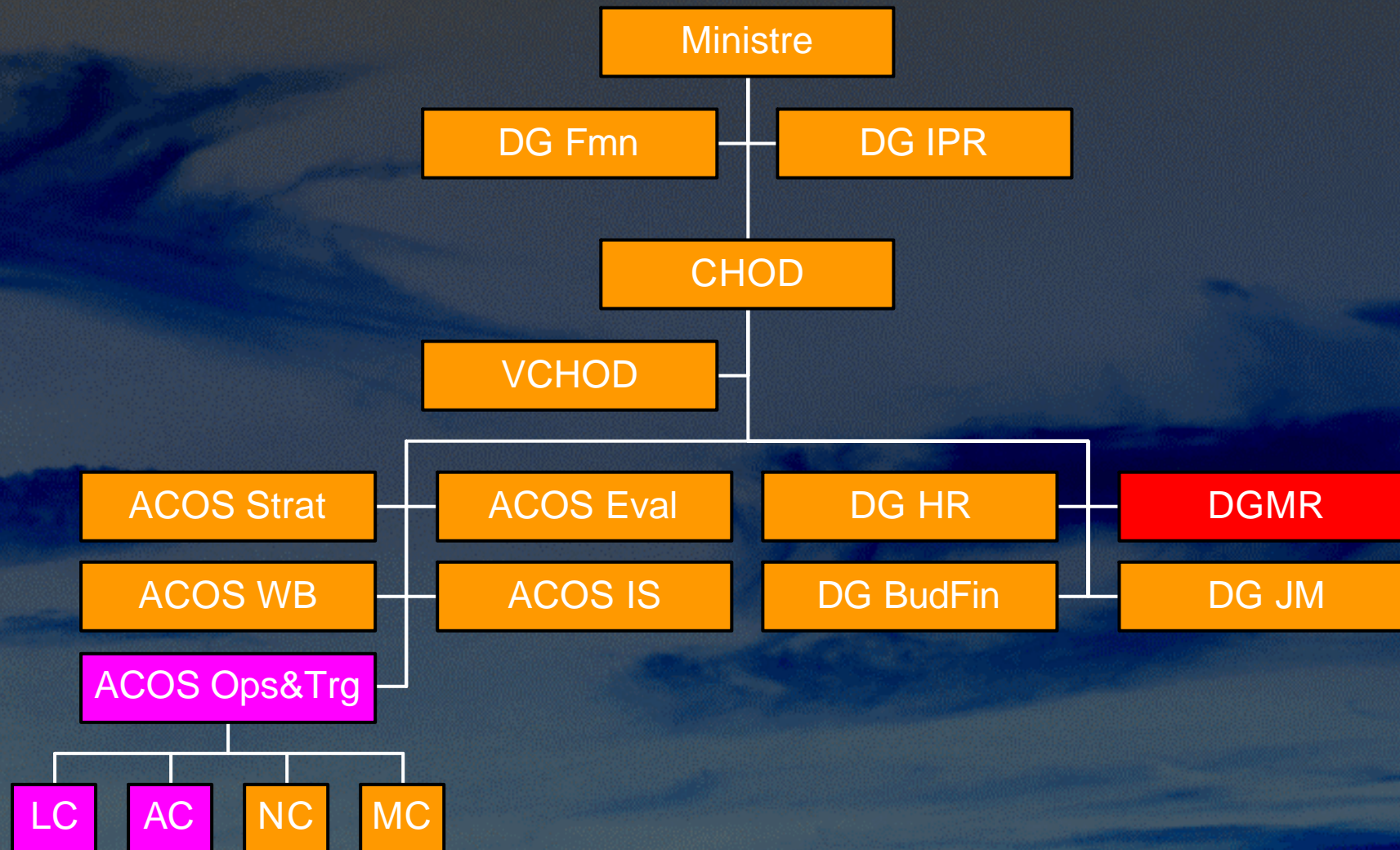
Flight safety process overview



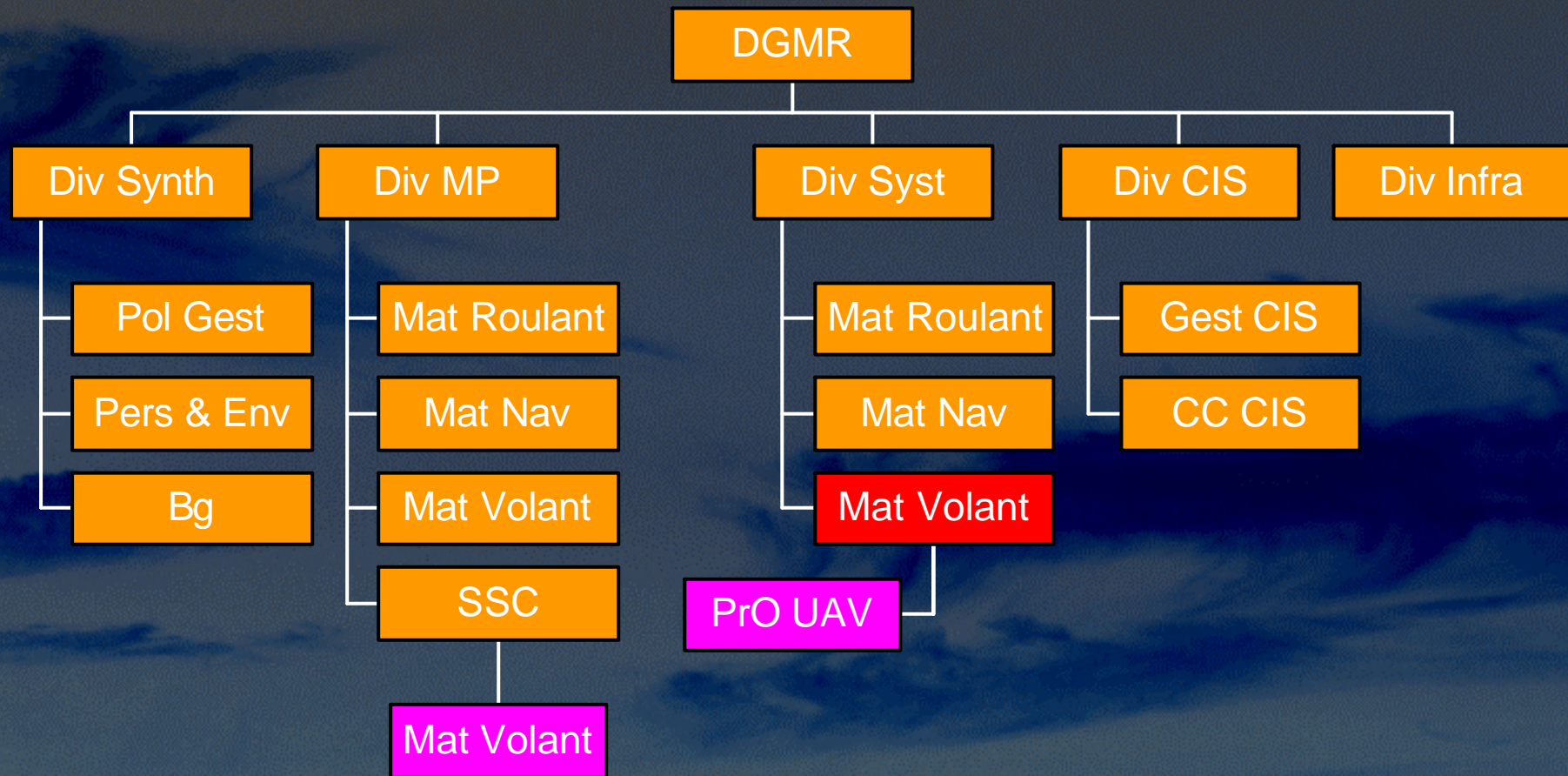
Certification: Old Organisation



New BMoD Structure



Certification: New Organisation





Conclusion

- Flying UAV just like MAV is a matter of:
 - Having a good, certified system
 - Having a skilled personnel
 - Making good procedures
 - But most important:
 - Having the will to do it
 - Going step by step
 - Informing and persuading all actors (users, populations, politicians, ...)
 - There will always be a next step
-

Questions - Comments

